

Fig. 1

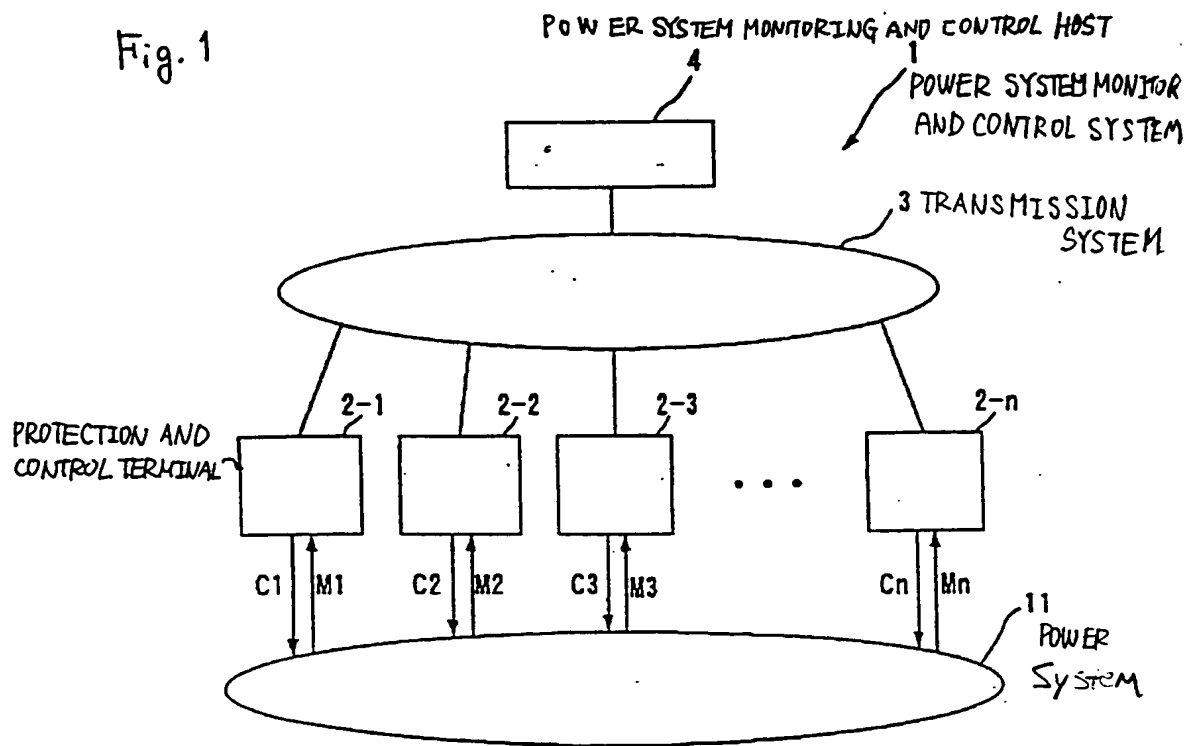


Fig.2

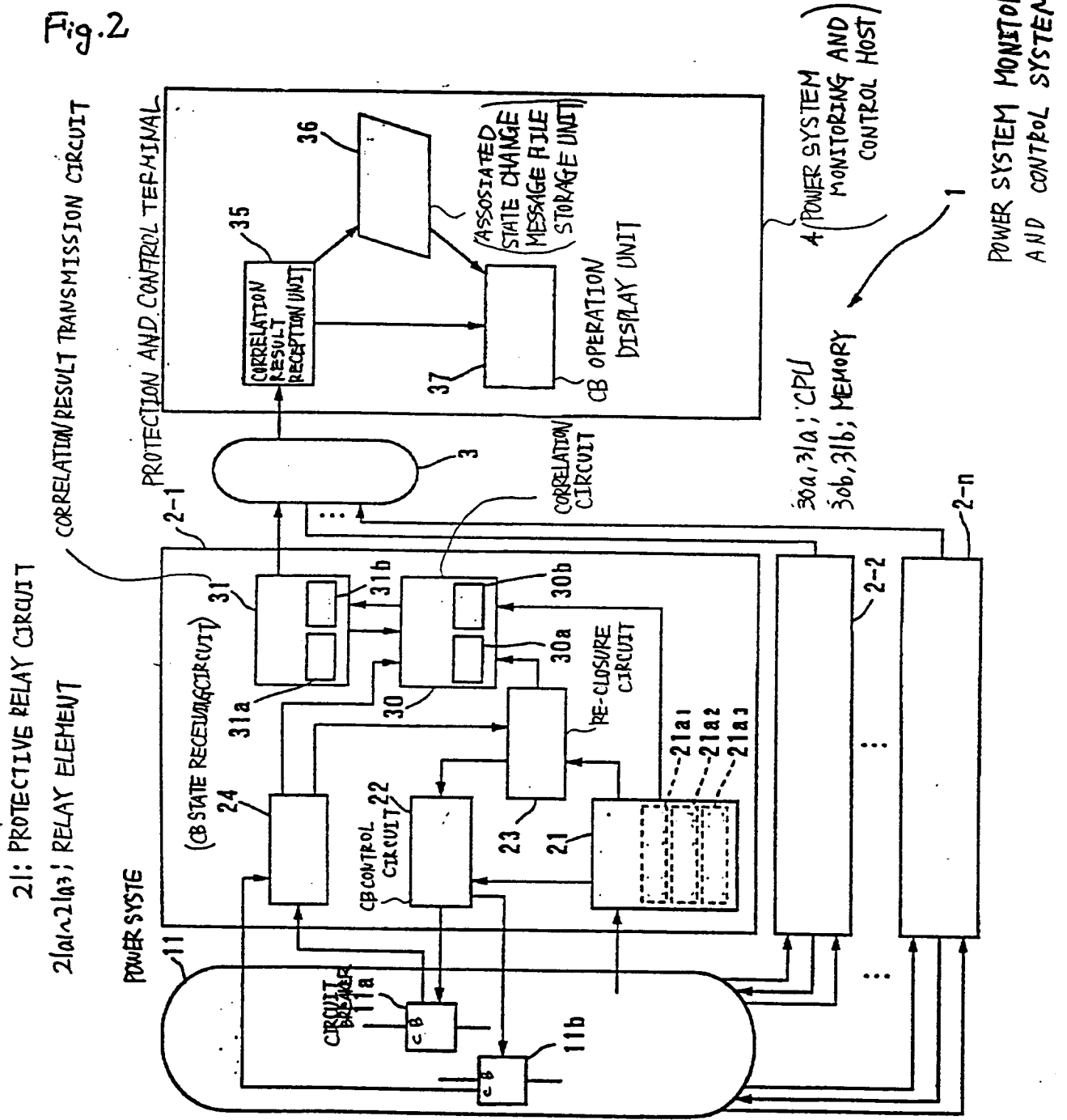
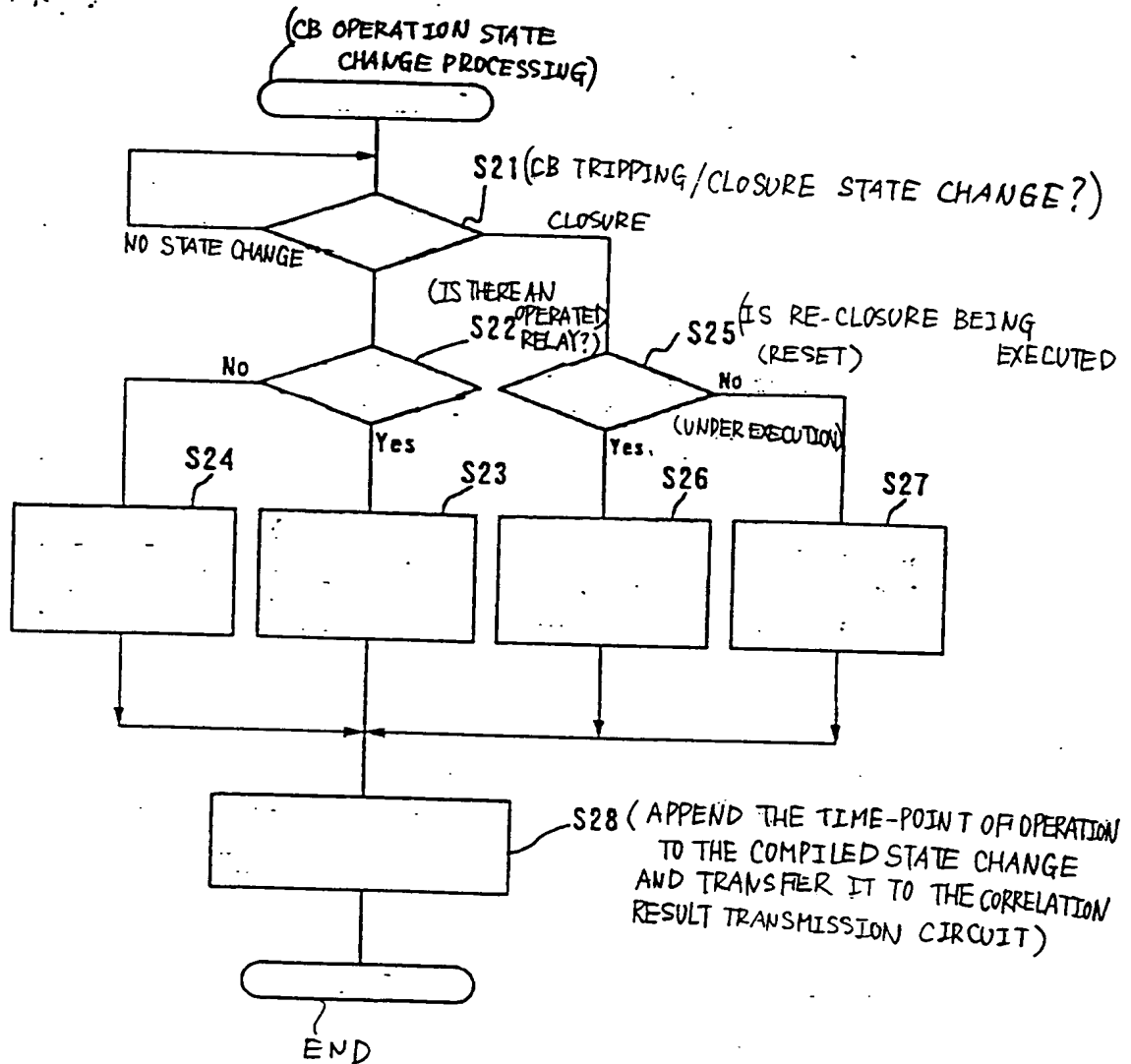


Fig. 3



S24; COMPILE STATE CHANGE MESSAGE OF CB TRIPPING PRODUCED BY MANUAL OPERATION OF DEVICE

S23; COMPILE STATE CHANGE MESSAGE OF CB FAULT TRIPPING, APPENDING THERETO THE NAME OF THE OPERATED RELAY

S26; COMPILE STATE CHANGE MESSAGE OF CB CLOSURE PRODUCED BY RE-CLOSURE CONTROL

S27; COMPILE STATE CHANGE MESSAGE OF CB CLOSURE PRODUCED BY MANUAL OPERATION OF EQUIPMENT

FIG. 4

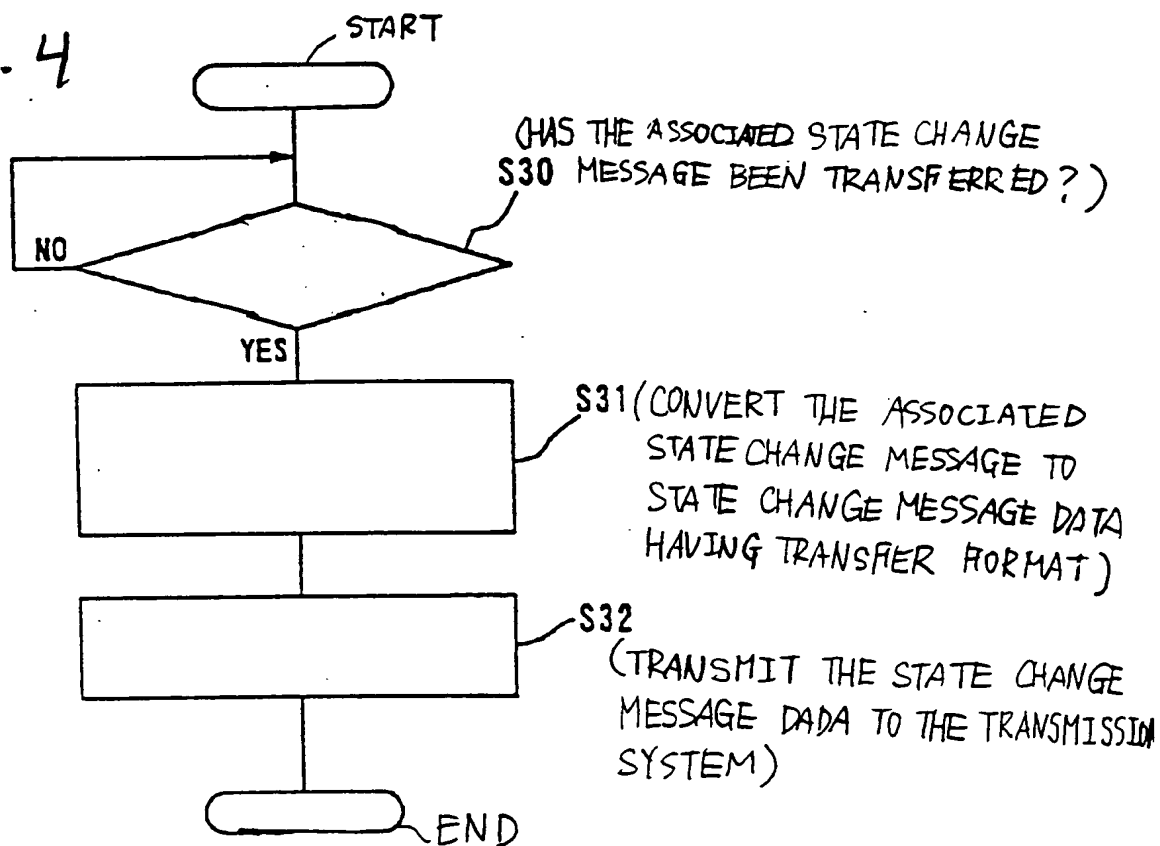
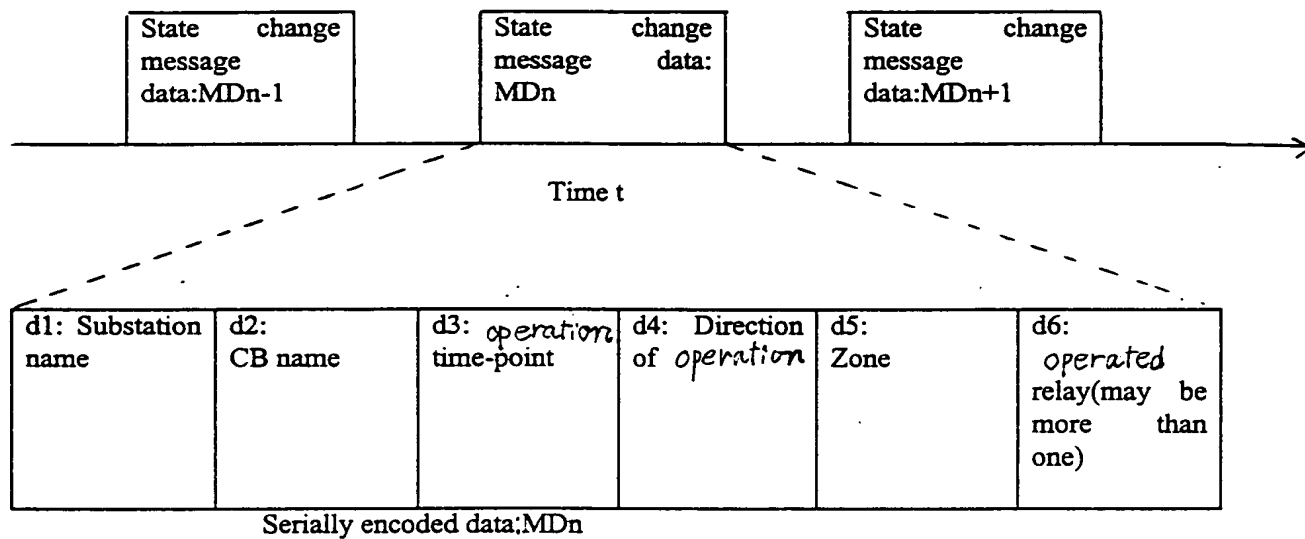


Fig. 5



[illegible]

	d1	d2	d3	d4	d5	d6
MD1	Substation A	XY transmission line 2L CB	10:10:10	trip	Fault state change	Main protection (ground fault) Backup ground fault
MD2	Substation A	XY transmission line 2L CB	10:10:11	Close	Re-closure succeeded	
MD3	Substation B	XY transmission line 1L CB	10:10:01	Close	Manual state change	

Fig. 7

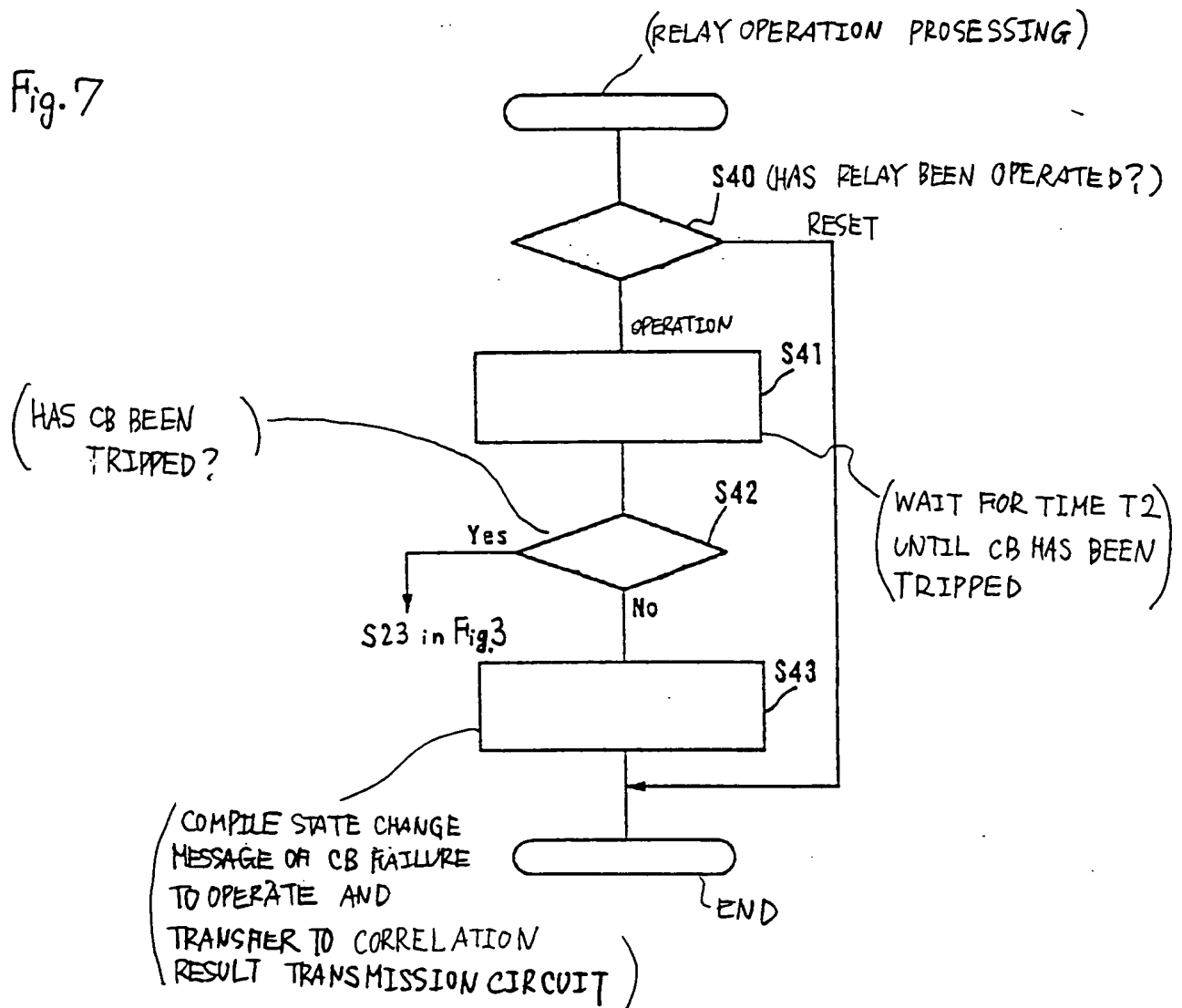


Fig. 8

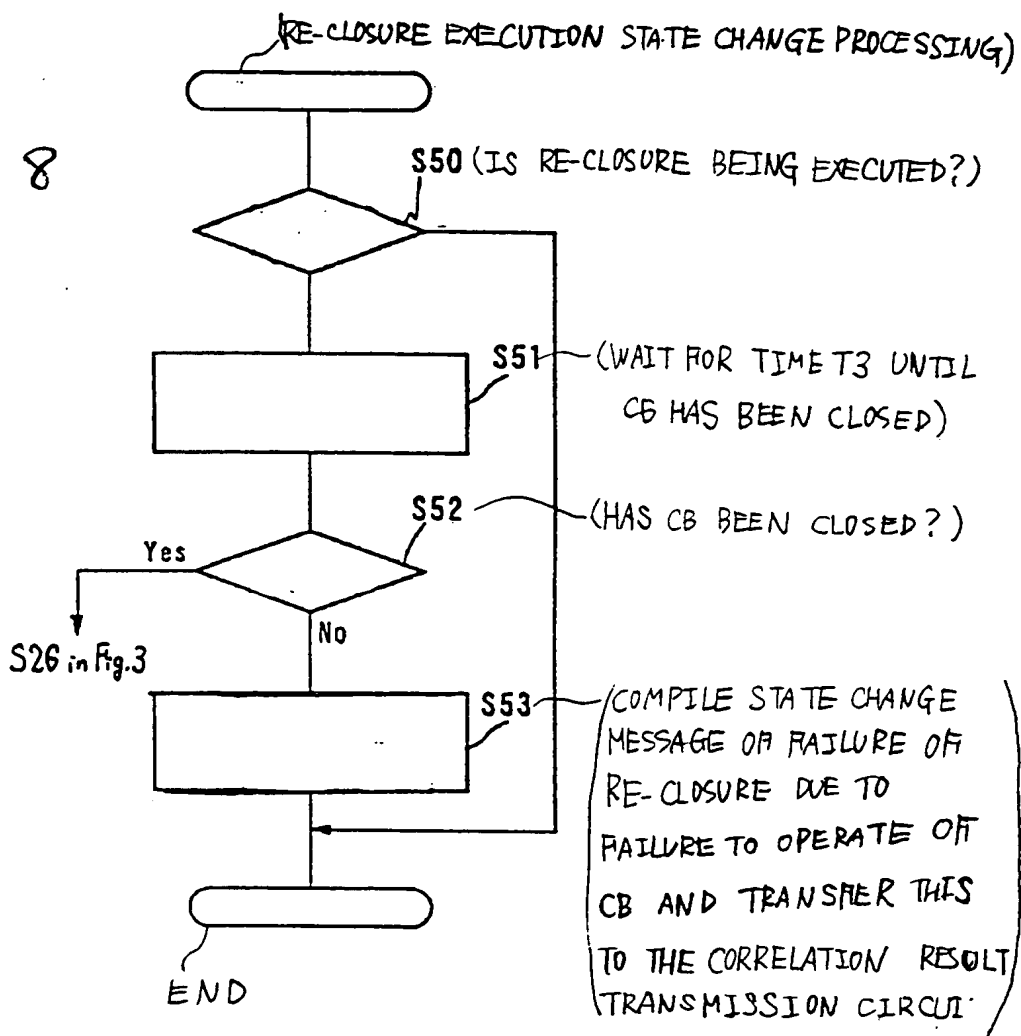




Fig. 9

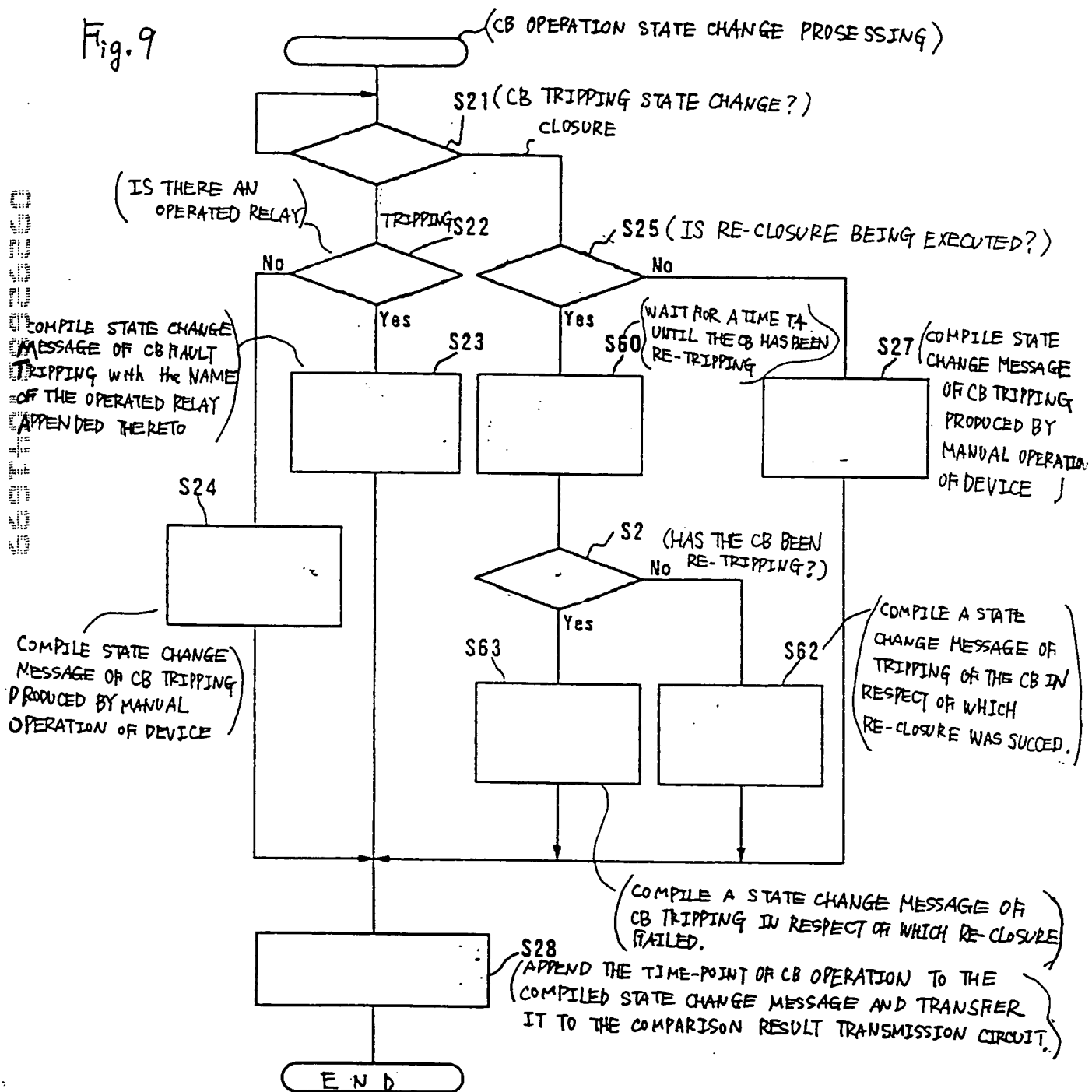


Fig. 10

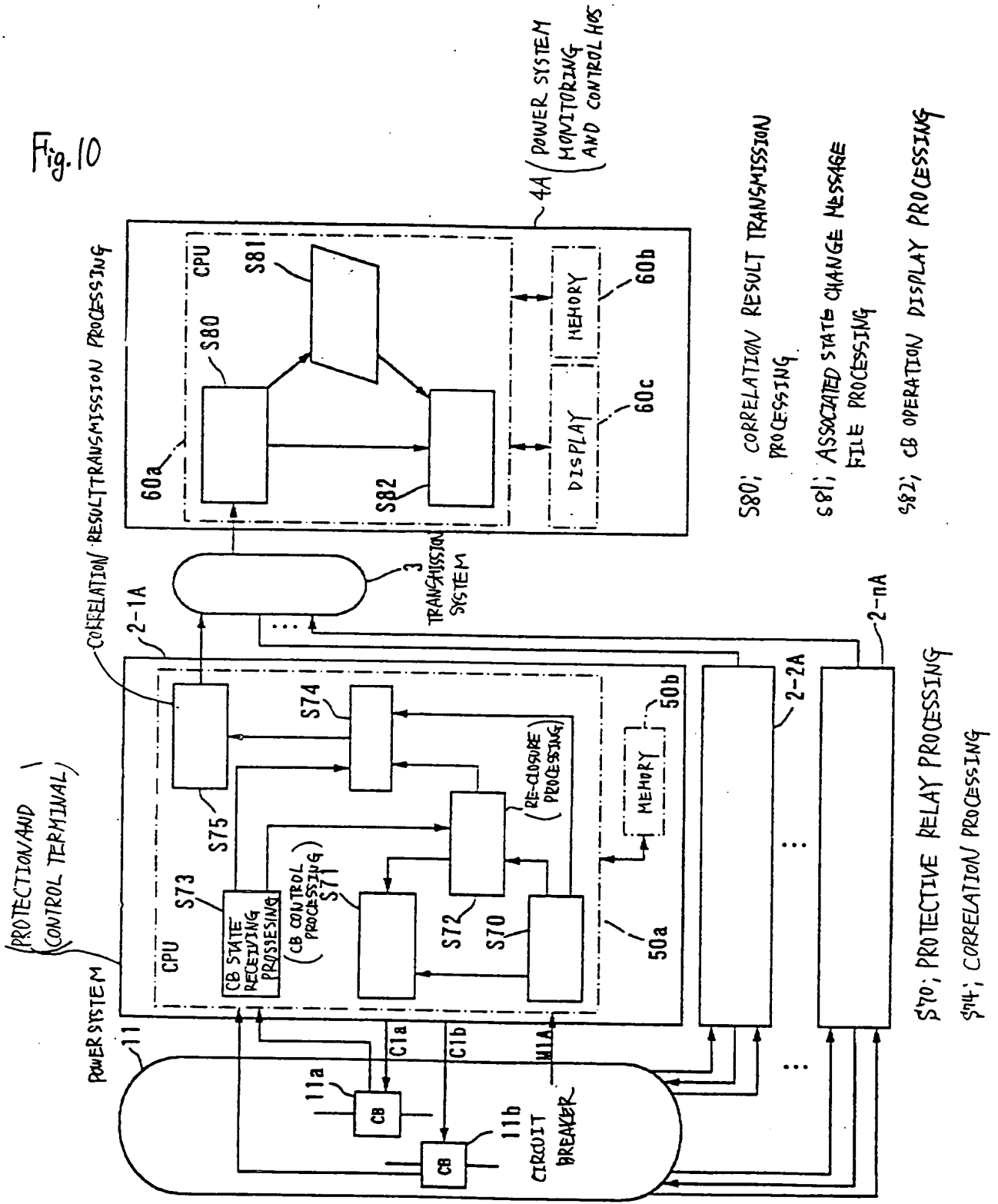


Fig. 11

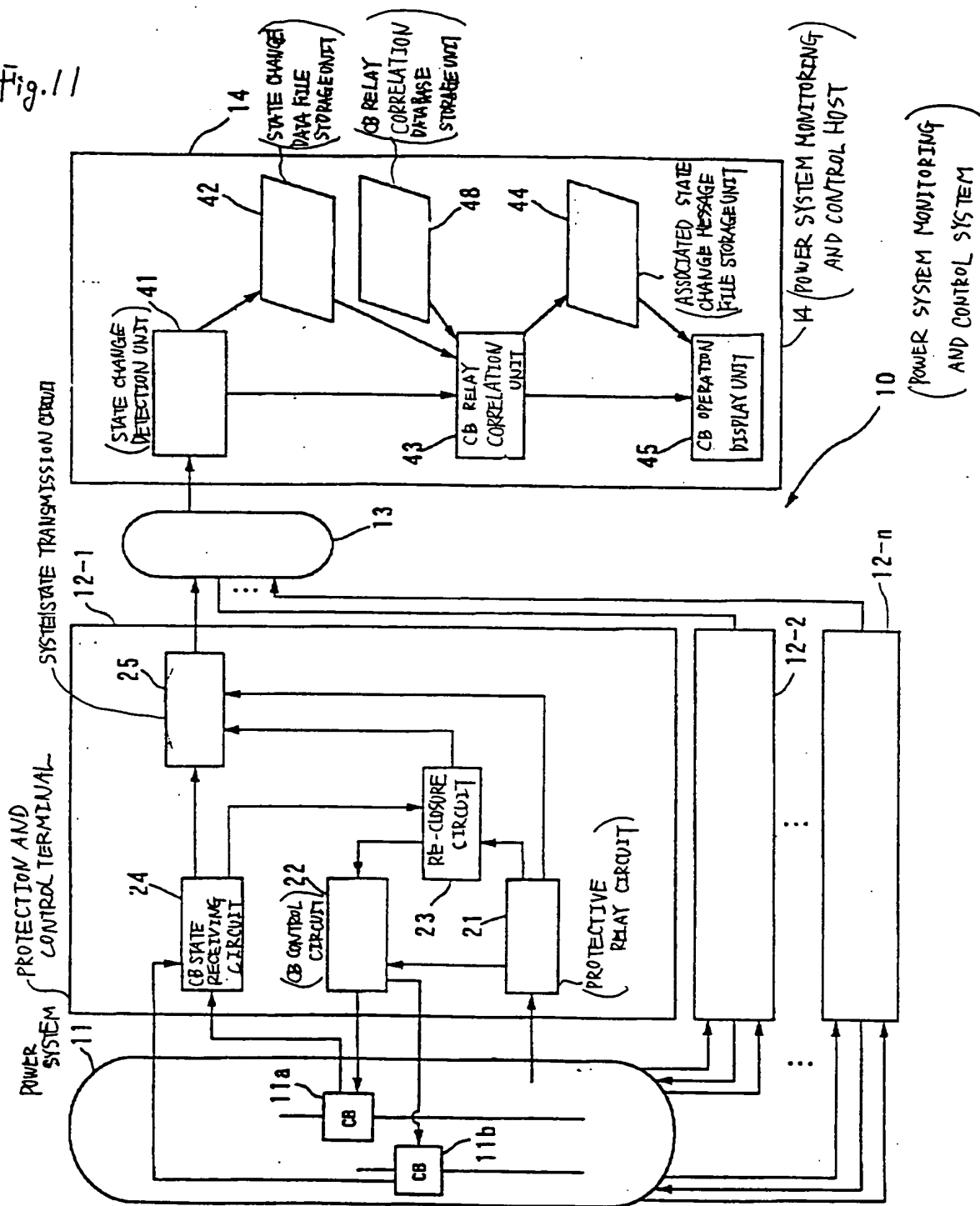


Fig. 12

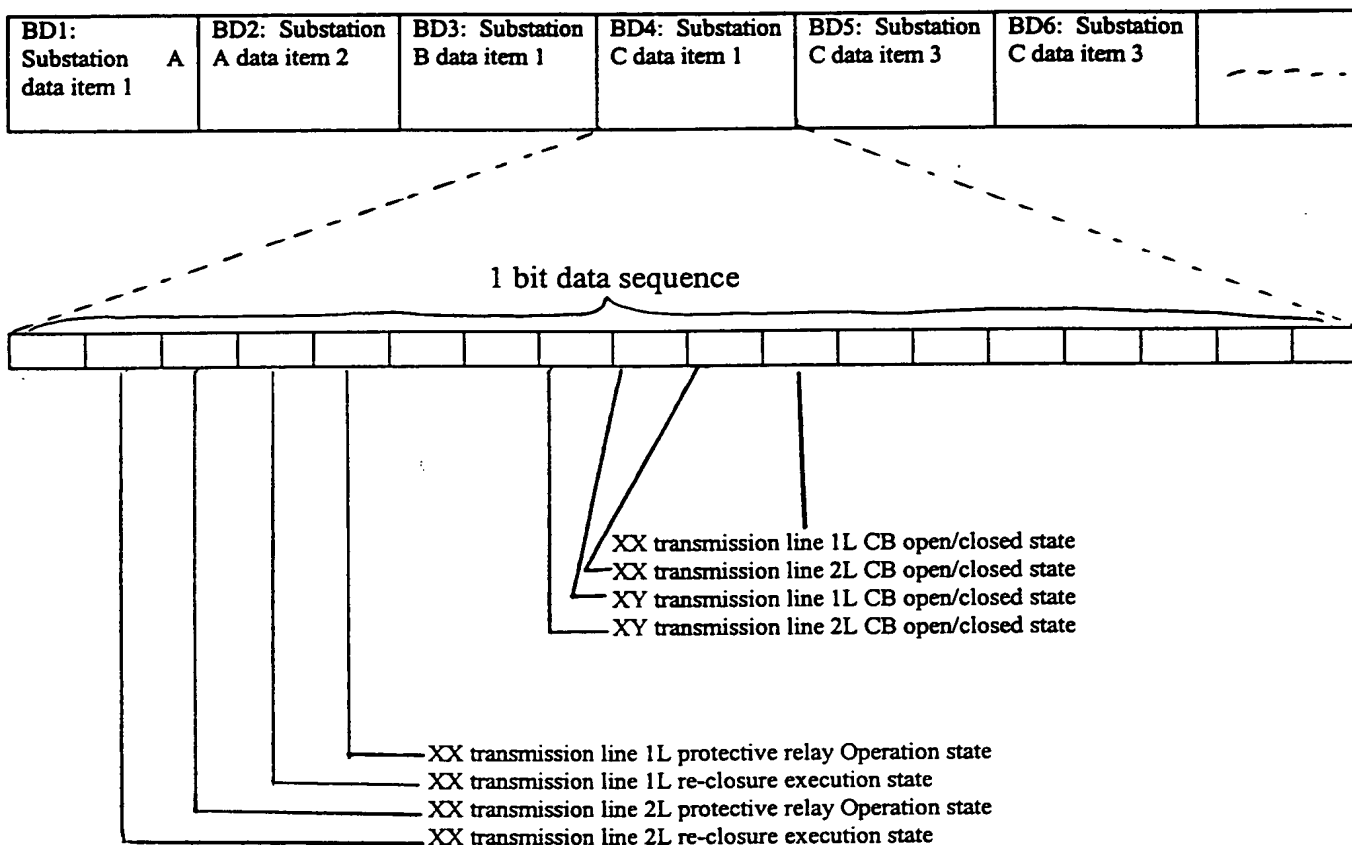


Fig. 13

D1	January 19th 22:01:15	Substation C	XX transmission line 1L	Main protection (ground fault)	Operate
D2	January 19th 22:01:15	Substation C	XX transmission line 1L	CB	Trip
Dx1	January 19th 22:01:15	Substation B	FF transmission line 1L	Main protection (ground fault)	Operate
Dx2	January 19th 22:01:15	Substation Z	YY transmission line 2L	CB	Operate
Dx3	January 19th 22:01:15	Substation A	FF transmission line 1L	CB	Trip
Dx4	January 19th 22:01:16	Substation A	FF transmission line 1L	Main protection (ground fault)	Operate
Dx5	January 19th 22:01:16	Substation B	FF transmission line 1L	CB	Trip

Fig. 14

M	January 19th 22:01:15	Substation C	XX transmission line 1L	CB	Fault Trip	Main protection (ground fault)	Operate
M1	January 19th 22:01:15	Substation Z	YY transmission line 2L	CB	Fault Trip	Manual operate	
M2	January 19th 22:01:15	Substation A	FF transmission line 1L	CB	Fault Trip	Main protection (ground fault)	Operate
M3	January 19th 22:01:15	Substation B	FF transmission line 1L	CB	Fault Trip	Main protection (ground fault)	Operate

Fig. 15

CB: subject of correlation	Association with direction of Tripping	Association with direction of closure
:	:	:
Substation C: XX transmission line 1L CB	1)Substation C: XX transmission line 1L Main protection (ground fault) 2)Substation C: XX transmission line 1L Backup protection 3)Substation C: Bus protection	Substation C: XX transmission line 1L Re-close
Substation C: XX transmission line 2L CB	1)Substation C: XX transmission line 2L Main protection (ground fault) 2)Substation C: XX transmission line 2L Backup protection 3)Substation C: Bus protection	No association
:	:	:

Fig.16

